

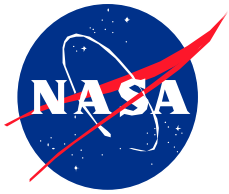
Presentation to the AETD Safety Council

GSFC RECERTIFICATION PROGRAM

ROLES & RESPONSIBILITIES

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RECERT Manager
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5/16/2006

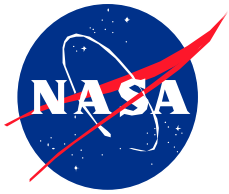


OVERVIEW

GSFC RECERTIFICATION PROGRAM (RECERT)



- A Center-wide safety program – Greenbelt, Wallops, off-sites
- Requirements mandated by OSHA, NASA, and GSFC
- Center policy requires LDE and PV/S to be certified by the RECERT Manager prior to operations
- Provides scheduled test, inspection, certification, recertification for:
 - Lifting Devices and Equipment (LDE) – GPR 8719.1
 - ✓ Bridge cranes, gantries, hoists, mobile cranes
 - ✓ Hydra-sets, slings, sling assemblies, and hardware components
 - ✓ Mobile Aerial Platforms, Powered Industrial Trucks, and critical Jacks
 - Ground-based Pressure Vessels and Pressurized Systems (PV/S) – GPR 8710.3:
 - ✓ Cryogenic, compressed gases (including air), hydraulic, lube oil, aviation fuel, vacuum, and R&D systems; purge carts
 - ✓ Vessels, reliefs, gages, piping, flex hoses

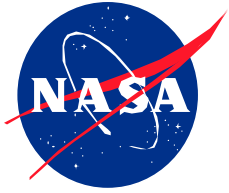


OVERVIEW

GSFC RECERTIFICATION PROGRAM (RECERT) (Cont'd)



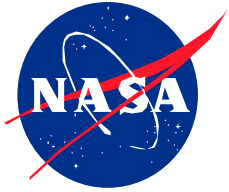
- Provides training, certification, and recertification of LDE Operators and Critical Lift Coordinators
- Reviews and processes Variance Requests
- Provides LDE and PV/S consultation for upgrades, design review, and approval to assure Code compliance and ability to certify



LDE RECERT MANAGER'S RESPONSIBILITIES EXCERPT FROM GPR 8719.1



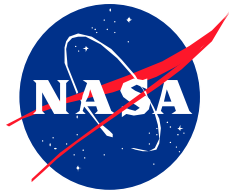
- **RECERT Manager's responsibilities include:**
 - **Implements and enforces RECERT requirements**
 - **Provides test, inspection, certification, and recertification of LDE**
 - **Certify LDE including MAP & PIT operators; and Critical Lift Coordinators**
 - **Reviews and approves MAP and PIT training programs given by others**
 - **Maintains a system for periodic inspection of LDE, review Logbooks, identifying deficiencies, and completion of corrective actions**
 - **Provides qualified and certified inspectors to perform test and inspections (T&I) meeting codes and standards**
 - **Provides consultation on LDE design, specification, and modification**
 - **Maintains a configuration management and certification status system**
 - **Performs compliance spot checks on LDE operations**



LDE OWNER'S RESPONSIBILITIES EXCERPT FROM GPR 8719.1



- **LDE Owner's responsibilities include:**
 - **Ensures LDE are certified before use**
 - **Ensures LDE (including PIT & MAP) operators are certified and licensed**
 - ✓ obtain crane operator training through RECERT
 - ✓ obtain MAP & PIT operator training from others
 - **Determines the LDE usage**
 - ✓ Classification (Critical or Noncritical)
 - ✓ Category (Active, Standby, Idle)
 - **Controls uncertified/expired LDE to preclude inadvertent use**
 - **Notifies RECERT/540 of all LDE deficiencies and incidents, and initiates appropriate Incident/Mishap Report per GPR 8621.1A**
 - **Initiates repair for LDE deficiencies found during test and inspections**
 - **Requests a RECERT LDE compliance review prior to any new procurement or proposed upgrades or modifications**
 - **Performs OEM recommended maintenance on MAP and PIT**
 - ✓ Initiate and fund major repairs on cranes



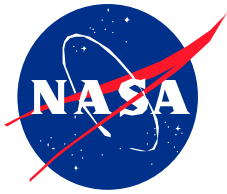
SAMPLE LDE RECERT TAGS



All Lifting Devices:
Cranes, Mobile Cranes,
Hoists, MAP, PIT,
Hydra-Sets, Lift Gates,
Etc.

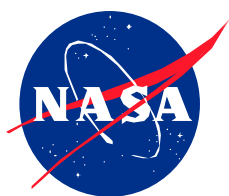


All Lifting
Equipment/
Hardware:
Slings
Shackles
Hoist Rings
Turnbuckles
Etc.



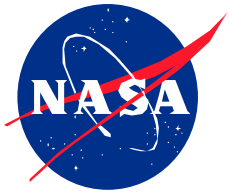
SAMPLE LDE OPERATOR LICENSES





SAMPLE MAP & PIT OPERATOR LICENSES

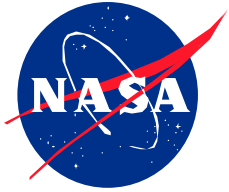




PV/S RECERT MANAGER'S RESPONSIBILITIES EXCERPT FROM GPR 8710.3



- **RECERT Manager's responsibilities include:**
 - **Implements and enforces RECERT requirements**
 - **Certifies PV/S for operation**
 - **Provides test, inspection, certification, and recertification of ground-based PV/S**
 - **Maintains a system for periodic in-service inspection (ISI), including identifying deficiencies, and completion of corrective actions**
 - **Provides qualified and certified inspectors to perform required T&I meeting codes and standards**
 - **Reviews and processes Variance Requests**
 - **Provides consultation on PV/S compliance for design, specification, and modification**
 - **Maintains a configuration management and certification status system**
 - **Performs compliance spot checks on PV/S**

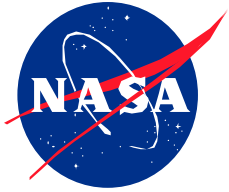


PV/S OWNER'S RESPONSIBILITIES EXCERPT FROM GPR 8710.3



➤ PV/S Owner's responsibilities include:

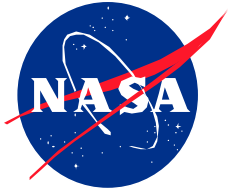
- Ensures PV/S are designed, fabricated, installed, and tested per Code requirements (ASME B31.3 – Process Piping)
- Submits required engineering drawings and documentation to RECERT / 540 for equipment certification
- Ensures new, modified, repaired, relocated, or transferred PV/S are certified and tagged by RECERT prior to operation
 - ✓ If not certified, submit a RECERT Work Request for compliance review
- Submits proposed modification and upgrades to RECERT / 540 (minimum 2 weeks, longer if a complex system) for compliance review prior to implementation



PV/S OWNER'S RESPONSIBILITIES EXCERPT FROM GPR 8710.3 (Cont'd)



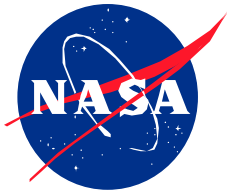
- **PV/S Owner's responsibilities include (Cont'd):**
 - **Positively controls uncertified/expired PV/S to preclude inadvertent use**
 - ✓ Segregates uncertified/expired items from certified items
 - ✓ Either tags each item "Do Not Use Until Certified", or locks them up in storage cabinets labeled "Certify Before Use" or similar wording
 - ✓ Generic "Out of Cert" or Red Tags may be obtained from RECERT/540 as needed
 - **Ensures OEM recommended maintenance on PV/S is performed**
 - **Allows necessary down time of PV/S for RECERT to perform T&I to maintain system certification**
 - **Notifies RECERT/540 of all PV/S Close Calls and Mishaps, report per GPR 8621.1A**
 - **Initiates repair of PV/S deficiencies per RECERT T&I report, and notifies RECERT / 540 upon completion so that a reinspection can be scheduled**
 - **Ensures pressure system operators are trained and qualified, with documentation, to operate the equipment**



REQUIRED PV/S DOCUMENTATION FOR SYSTEM CERTIFICATION



- **Before RECERT can certify a system, the following information from the owner is required:**
 - A. Building #, Room #, and/or location
 - B. Manufacturing Data Reports (MDR) MDR Form U-1A, as applicable (should have been supplied or can be obtained from the vendor)
 - C. Piping info, as applicable
 1. Design and operating conditions
 2. Material Specification (ASTM or ASME)
 3. Pipe/tubing Size
 4. Pipe/tubing Wall thickness
 5. Pipe/tube fitting type and class (socket weld, butt weld, threaded, mechanical (swage)
 6. Valve type, manufacturer, model number, material of construction (body, stem, seat(s), pressure and temperature rating
 7. Overpressure protection: Manufacturer, model number, type, size, capacity, set point, seat material
 8. Pressure Regulators: Manufacturer, model number, type (single stage, dual stage), material, size, max inlet pressure, max outlet pressure
 9. Pressure gages: Manufacturer, model number, inlet size, range
 10. As-built piping and instrumentation diagram
 11. Certificate of Compliance from fabricator and/or installer that the System meets the Code fabrication and installation requirements
 12. Record of Code-required NDT
 13. Record of Code-required pressure test
- **For non-compliant systems, the owner must prepare a Variance Request including a risk analysis, risk acceptance, processed and approved in accordance with NASA and GSFC requirements**



SAMPLE PV/S RECERT TAGS





**GODDARD SPACE FLIGHT CENTER
RECERTIFICATION PROGRAM
CERTIFIED**

SYSTEM NO: SAMPLE

MAC NO: XXXXXX

UPV NO: XXXXXXXX

MAWP/MDP: XXX PSI @ XXX °F

EXPIRATION DATE: XXXXXXXX

RECERT SUPPORT: (301) 286-5181

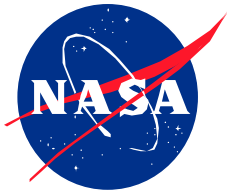


**GODDARD SPACE FLIGHT CENTER
RECERTIFICATION PROGRAM
CERTIFIED**

In accordance with NASA requirements and GPR 8710.3 periodic in service inspections have been performed by RECERT Support on SAMPLE To pressure system Number: SAMPLE and certified in accordance with the following checked of applicable procedures.

<u>XXXXXXXX</u>	NMP-101, Magnetic Particle Test
<u>XXXXXXXX</u>	NMP-102, Liquid Penetrant Test
<u>XXXXXXXX</u>	NMP-109, Ultra Sonic Test
<u>XXXXXXXX</u>	NMP-111, Liquid Penetrant Test
<u>XXXXXXXX</u>	NMP-113, Magnetic Particle Test

If there is a problem with or a question regarding this vessel, contact RECERT Support at extension: (301) 286-5181.
Report Number : XXXXXXXX Expiration Date: XXXXXXXX



SAMPLE PV/S RECERT TAGS



GODDARD SPACE FLIGHT CENTER
RECERTIFICATION PROGRAM
CERTIFIED
GAGE INSPECTION TAG

I.D. # SAMPLE
MAWP: XXXXXXX
INSPECTION DATE: XXXXX
EXPIRATION DATE: XXXXX
REPORT # XXXXXXXXXX
INSPECTOR: XXXXXXXXXX
RECERT SUPPORT: (301) 286-5181

GODDARD SPACE FLIGHT CENTER
RECERTIFICATION PROGRAM
CERTIFIED
RELIEF VALVE INSPECTION TAG

I.D. # SAMPLE
SET PRESSURE: XXXXXX
INSPECTION DATE: XXXXXX
EXPIRATION DATE: XXXXXX
REPORT # XXXXXXXXXX
INSPECTOR: XXXXXX
RECERT SUPPORT: (301) 286-5181

GODDARD SPACE FLIGHT CENTER
RECERTIFICATION PROGRAM
CERTIFIED
GAGE VT INSPECTION TAG

I.D. # SAMPLE
MAWP: XXXXXXXXXX
INSPECTION DATE: XXXXXX
EXPIRATION DATE: XXXXXX
REPORT # XXXXXXXXXX
INSPECTOR: XXXXXX
RECERT SUPPORT: (301) 286-5181

GODDARD SPACE FLIGHT CENTER
RECERTIFICATION PROGRAM
CERTIFIED
FLEX HOSE INSPECTION TAG

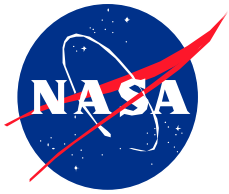
I.D. # SAMPLE
MAWP: XXXXXXXXXX
INSPECTION DATE: XXXXXX
EXPIRATION DATE: XXXXXX
REPORT # XXXXXXXXXX
INSPECTOR: XXXXXX
RECERT SUPPORT: (301) 285-5181

GODDARD SPACE FLIGHT CENTER
RECERTIFICATION PROGRAM
MAG PARTICLE INSP. TAG

PROJECT: SAMPLE
ID. # XXXXXXXXXX
INSPECTION DATE: XXXXXXXXXX
TYPE: XXXX METHOD XXXX
REPORT # XXXXXXXXXX
INSPECTOR: XXXXXXXXXX
RECERT SUPPORT: (301) 286-5181

GODDARD SPACE FLIGHT CENTER
RECERTIFICATION PROGRAM
DYE PENETRANT INSP. TAG

PROJECT: SAMPLE
ID. # XXXXXXXXXX
INSPECTION DATE: XXXXXXXXXX
TYPE: XXXX METHOD XXXX
REPORT # XXXXXXXXXX
INSPECTOR: XXXXXXXXXX
RECERT SUPPORT: (301) 286-5181



GSFC RECERTIFICATION PROGRAM



- **Safety is everyone's responsibility**
- **Program success can only be achieved with everyone's full participation and cooperation**
- **For RECERT assistance on PV/S and LDE, please contact:**
 - **At Greenbelt**
 - ✓ Stanley Chan / RECERT Manager, Code 540, x6-4209
 - ✓ Warren Thomas / ManTech RECERT Function Manager, Code 540.5, x6-5183
 - ✓ Stratton Karahalias / ManTech RECERT Supervisor, Code 540.5, x6-1179
 - **At Wallops**
 - ✓ Prasad Hanagud / Deputy RECERT Manager/WFF, Code 500.W, x1359
 - ✓ Bill Hargrove / ManTech RECERT Supervisor, Code 540.5, x1797